OFFICE OF		AW MODIF			875 Nort	Y: f Naval Res h Randolph n, VA 22203	Street	
NAVAL PEGENBO	H	1. INSTRUMENT TYPE: Grant			3b. CFDA: 12.300	1		
AL RESEA	9	2. AUTHORITY:			3c. DUNS NU			
4. AWARD NO.:		10 USC 2358, 3. 5. MODIFICATION NO.:		6304 DIFICATION TYPE:	7. PR NO.:			
N00014-10-1-0195 8. ACTIVITY/AGENCY PROPOSAL	NO :	9. RECIPIENT PROPOSA	New	i 10. PROPOSAL D		013-00	12. PROGR	AM TVDE:
N/A	_	N/A		12-NOV-09			oth	AIVITTPE:
13. ISSUED TO 13b. CAGE: 13a. ADDRESS: 1JDU4	13c. ED 1155	I/EFT NUMBER:		TTANCE ADDRESS e as block :		T FROM BLOCK	13):	
DREXEL UNIVERSITY OFFICE OF RESEARCH A 3201 ARCH STREET SU PHILADELPHIA, PA 19	ITE 100	RATION						
13d. BUSINESS OFFICE CONTACTION Timothy Schailey	T:		1					
13e. TELEPHONE NUMBER: 13f.	. EMAIL ADD s42@drexel.e	RESS:	1					
15. RESEARCH TITLE AND/OR DE Control Scheme Limit					ms Formula	ation and F	Related I	ssues
16. FUNDING	ΔCTIVITY/Δ	GENCY SHARE REC	IPIENT SH	IARE	TOTAL	17. CURRENT	FLINDING PER	UOD
	ACTIVITIE	\$.00	_	.00	\$.00		I/A THROUGH	NOD
PREVIOUSLY OBLIGATED:		•	•				THROUGH [/A	
OBLIGATED BY THIS ACTION:	Ş	25,000.00	Ş	\$.00 \$25,000				
TOTAL OBLIGATED ON AWARD:	\$	25,000.00	\$.00 \$	25,000.00	18. PERIOD OF	FPERFORMAN 30-NOV-09	
FUTURE FUNDING:	\$4	15,000.00	\$.00 \$4	15,000.00		THROUGH 31-DEC-12	
GRANT TOTAL:	\$4	40,000.00	\$.00 \$4	40,000.00			
19. ACCOUNTING AND APPROPR See attached Financi			(s)					
20a. PRINCIPAL INVESTIGATOR/F	RECIPIENT		21. TECH	NICAL REPRESEN	ITATIVE		21b. CODE:	
TECHNICAL REPRESENTATIVE: CHIKAODINAKA NWANKPA			21a. NAM 21c. ADDI	E: Anthony J	. Seman		ONR 33	31
			Offic 875 N	ress. Se of Naval North Randol Ngton, VA 22	ph Street			
20b. TELEPHONE NUMBER: 20c	. EMAIL ADD	RESS:	21d. TELE	EPHONE NUMBER	:	21e. EMAIL AD	DRESS:	
(- /	ankpa@ece.dı) 696-5992		SEMANA@ONR.NA		
22. AWARDING OFFICE CONTACT 22a. NAME: Diane Gales	Т	22b. CODE: ONR BD025	23a. ADM	INISTRATIVE OFF	ICE:		23b. CODE: N6288	0
22c.ADDRESS: Office of Naval Rese. 875 North Randolph S Arlington, VA 22203-	treet		230 S CHICA PHONE	REG. OFFICE SOUTH DEARBO AGO, IL 6060 E: (312) 886 (312) 353-2	ORN, ROOM: 04-1595 5-5423			
(703) 696-2593 Gi	ALESD@ONR.NA	VY.MIL						
24. SUBMIT PAYMENT REQUEST	TO: 25	a. PAYING OFFICE:	25b. COD	E: 0251	26a. PATENT	OFFICE:	26b. CODE: N0001	4
Same as block #23a		DFAS COLUMB-NAVY COLUMBUS, OH 4321	ACQ HQ		ATTN: ONF One Liber 875 North	E Naval Rese R BDCC rty Center n Randolph S n, VA 22203-	earch Street, Su	

AWARD NO.	AWARD/MODIFICATION	MODIFICATION NO.	
N00014-10-1-0195 27. SPECIAL INSTRUCTIONS:			
See "Special Requirements" Atta	ahmon+		
See Special Requirements Acta	rement.		
OO DELEGATIONIO TIL LIVIN III LIII LIIII		(1.1.00.) 11	(" , , (, , 00)
28. DELEGATIONS: The administration duties listed be will make their full text available. Please direct question	ns to the contacts @:	e (block 23a). Upon request the awarding vy.mi1/02/024/offices.as	
Full Delegation			
TERMO AND CONDITIONS TO A RESIDENCE			
29. TERMS AND CONDITIONS: The following terms a Upon request the awarding office contact named in blooming terms of the contact named in blooming terms.			ere given in full text.
DOCUMENT	URL	o reality at the opening of the	
UAAC Acceptance C November 2003		//www.onr.navy.mil/02/terms	
Agency Specific April 2009 UAWA Award A November 2003		//www.onr.navy.mil/02/terms //www.onr.navy.mil/02/terms	
Core July 2008		//www.onr.navy.mil/02/terms	
30. OPTIONS OPTION NO.	AMOUNT	PERIOD	
(1)			
(2)			
(3)			
(4)			
31. REPORTS: The following reports must be submitted the project. Final Technical Reports must have a SF29			
Block 12a of the SF298 as follows: "Approved for Pub		i. Offiess offierwise stated in the award/in	Julication, complete
ADDRESSEE	REPORT TYPE		COPIES
See block #21 (Frequency)	Performance/Technical R	eport (As Required) with	1 1
	SF298		
~ 17 1 100	Describe of Transcribions on	J. C1	
See block #23a	Performance/Technical R	d Subcontracts - DD 882	1
		Status Report - SF425 -	- 1
	Including Line Item 11	1	
Defense Technical Information C	enter Performance/Technical R	eport (As Required) with	1
8725 John J Kingman Road Ste 09			
Fort Belvoir, VA 22060-6218			
See block #26a	Report of Inventions an	d Subcontracts - DD 882	1
Naval Research Laboratory	Performance/Technical R	eport (As Required) with	1
ATTN: CODE 5596	SF298	epore (his hequired) wren	` -
4555 Overlook Avenue SW			
Washington, DC 20375-5320			
32. FOR THE RECIPIENT		ED STATES OF AMERICA	
32a. SIGNATURE OF PERSON AUTHORIZED TO SI	GN 33a, SIGNATURE (b)(6)	OF AWARDING OFFICER	
N/A - SIGNATURE NOT REQUIRED			
32b. NAME AND TITLE OF SIGNER	32c. DATE SIGNED 33b. NAME AND T	ITLE OF AWARD OFFICER	33c. DATE SIGNED
	Diane Gale	S	15-JAN-10

FINANCIAL ACCOUNTING DATA SHEET - NAVY

1. CONTRACT	NUMBER (CRITIC	CAL)	2. SPIIN (CRIT	ICAL)		3. MOD	(CRITIC	AL)		4. PR NUME	BER				
N00014-	10-1-019	5								10PR	03013-0	0			
	6. LINE OF ACC		I.			ı								7.	
CLIN/SLIN	A.	В.	C.	D.	E.	F.	G.	Н.	I.	J.	K.			AMOUNT	NAVY INTERNAL USE ONLY
	ACRN (CRITICAL)	APPROPRIATION (CRITICAL)	SUBHEAD (CRITICAL)	OBJ CLA	PARM	RFM	SA	AAA (CRITICAL)	IT	PAA	PROJ	ST CODE	PDLI	AMOUNT (CRITICAL)	REF DOC/ACRN
	(011110/12)	(311113/12)	(011110712)								UNIT	MCC	& SUF		
	AA	1701319	W1AE	255	RA	333	0	068342	2D	000000	03114	000	4AK0	\$25,000.00	PR#10PR03013-00 FRC:34AK
								<u> </u>				PAG	<u>l</u> GE TOTAL	\$25,000.00	
														\$25,000.00	
PREPARED/AU	JTORIZED BY:					COMPT	ROLIFR	: APPROVAL:				GRAI	ND TOTAL	\$25,000.00	
						F	OR FIS	CAL DATA AND S	IGNATU	RE					
DATE:						DATE:	BY							for COMPTROLLER	, ONR CONTRACT REVIEWED

FINANCIAL ACCOUNTING DATA SHEET - NON-NAVY DoD ACTIVITIES

CONTRACT NUMBER	R (CRITICAL)	2. SPIIN (CRITICAL)	3. MOD (CRITICAL)	4. PR NUMBER				
N00014-10-1-01	195			10PR03013-00				
5. CLIN/SLIN 6. ACRN (CRITICAL)	7.	ACC	L COUNTING CITATION			8. AMOUNT (CRITICAL)		NAVY INTERNAL USE ONLY REF DOC/ACRN
		This	page is int	tentionally	blank			
1					PAGE TOTAL			
						\$.00		
PREPARED/AUTHORIZED B	3Y:			COMPTROLLER APPROVAL:	GRAND TOTAL	\$.00		
DATE:	•••			FOR FISCAL DATA AND SIG BY DATE:	GNATURE	for COMPTROLLER,	ONR CONTRAC	CT REVIEWED

VARD NO. 00014-10-1-0195	SPECIAL REQUIREMENTS	MODIFICATION NO.
ne following Articles are applicable to this	grant:	
the Department of Defense Appropriation	or 10 basic research appropriations and is subject to the reimburents Act, 2010 (P.L. 111-118). Payment of F&A for research with	sement limit on F&A set forth in Section a funds obligated by this action may not
ceed 35% of the total funds provided und	der this grant action."	